

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number
WO 03/106634 A2

(51) International Patent Classification⁷: C12N T. [DE/US]; C/O Chiron Corporation, P.O. Box 8097, Emeryville, CA 94662-8097 (US).

(21) International Application Number: PCT/US03/18666

(74) Agents: LILLIS, Marcella et al.; Chiron Corporation, Intellectual Property-R338, P.O. Box 8097, Emeryville, CA 94662-8097 (US).

(22) International Filing Date: 13 June 2003 (13.06.2003)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(26) Publication Language: English

(30) Priority Data:
60/388,831 13 June 2002 (13.06.2002) US
60/472,189 20 May 2003 (20.05.2003) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:

US 60/472,189 (CIP)
Filed on 20 May 2003 (20.05.2003)
US 60/338,831 (CIP)
Filed on 13 June 2002 (13.06.2002)

(71) Applicant (*for all designated States except US*): CHIRON CORPORATION [US/US]; 4560 Horton Street, Emeryville, CA 94608-2916 (US).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 03/106634 A2

(54) Title: VECTORS FOR EXPRESSION OF HML-2 POLYPEPTIDES

(57) Abstract: A nucleic acid vector comprising: (i) a promoter; (ii) a sequence encoding a HML-2 polypeptide operably linked to said promoter; and (iii) a selectable marker. Preferred vectors comprise: (I) a eukaryotic promoter; (ii) a sequence encoding a HML-2 polypeptide downstream of and operably linked to said promoter; (iii) a prokaryotic selectable marker; (iv) a prokaryotic origin of replication; and (v) a eukaryotic transcription terminator downstream of and operably linked to said sequence encoding a HML-2 polypeptide. Vectors of the invention are particularly useful for expression of HML-2 polypeptides either *in vitro* (e.g. for later purification). Or *in vivo* (e.g. for nucleic acid immunization). They are well suited to nucleic acid immunization against prostate tumors. A preferred HML-2 is PCAV, which is located in chromosome 22 at 20.428 megabases (22q11.2).